

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN W. BERTHOLD and LARRY A. JEFFERS

Appeal No. 1998-1524
Application No. 08/355,926¹

ON BRIEF

Before McQUADE, NASE, and GONZALES, Administrative Patent Judges.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 3, 4, 6 through 11 and 14, which are all of the claims pending in this application.²

¹ Application for patent filed December 14, 1994.

² Claims 1 and 11 were amended subsequent to the final rejection.

Appeal No. 1998-1524
Application No. 08/355,926

We AFFIRM-IN-PART.

BACKGROUND

The appellants' invention relates to a wide range temperature sensor (claims 1, 3, 4 and 6 through 10) and a method of sensing temperature within a broad range (claims 11 and 14). An understanding of the invention can be derived from a reading of exemplary claims 1 and 11, which appear in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Wickersheim et al.	5,112,137	May
12, 1992		
(Wickersheim)		

Dakin et al.	2,202,936	Oct. 5,
1988		
(Dakin)	(United Kingdom)	

Hartl et al., "Fiber optic temperature sensor using spectral modulation," SPIE, Vol. 838, Fiber Optic and Laser Sensors V (1987), pp. 257-261 (Hartl)

Admitted Prior Art, Figure 3 of the appellants' application (APA)

Claims 11 and 14 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to

particularly point out and distinctly claim the subject matter which the appellants regard as the invention.

Claims 1, 3, 4, 7, 8, 10, 11 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over APA in view of Dakin and Wickersheim.

Claims 6 and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over APA in view of Dakin, Wickersheim and Hartl.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the final rejection (Paper No. 7, mailed March 21, 1997) and the examiner's answer (Paper No. 13, mailed December 10, 1997) for the examiner's complete reasoning in support of the rejections, and to the appellants' brief (Paper No. 12, filed September 3, 1997) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims³, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The indefiniteness rejection

We sustain the rejection of claims 11 and 14 under 35 U.S.C. § 112, second paragraph.

The examiner determined (final rejection, p. 2) that claims 11 and 14 were indefinite because there was an

³ We note that claims 3, 4 and 10 may contain the following informalities. In claim 3, it appears to us that the recited structure (i.e., the 2x1 coupler) is part of the "means for applying light simultaneously" and not part of "the discriminator means." In claim 4, it appears to us that the recited structure (i.e., the wavelength-division-multiplexer) is part of the "means for applying light simultaneously" and not additional structure. In claim 10, it appears to us that the term "respectively" may be misleading in that the first listed wavelength (i.e., 690 nm) is not the first wavelength recited in claim 1 since the wavelength of 690 nm does not measure the lower temperature range, but instead measures the higher temperature range. The appellants and the examiner are encouraged to address these informalities.

insufficient antecedent basis for the limitation "the second wavelength" in line 10 of claim 11. The examiner has suggested changing "the second wavelength" to "a second wavelength" to overcome this rejection.

The appellants did not contest this rejection (brief, p. 9) since the appellants believed that this rejection was overcome by the amendment to claim 11 that was entered after the final rejection. However, the examiner maintained this rejection since the limitation "the second wavelength" in line 10 of claim 11 was not changed (answer, pp. 2-3 and 4).

Since the appellants have not contested the examiner's determination that claims 11 and 14 are indefinite, we are constrained to sustain the rejection under 35 U.S.C. § 112, second paragraph, because the appellants have not pointed out how the examiner erred in rejecting those claims.

The obviousness rejections

We will not sustain the rejection of claims 1, 3, 4, 6 through 11 and 14 under 35 U.S.C. § 103.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the appellants. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. The extent to which such suggestion must be explicit in, or may be fairly inferred from, the references, is decided on the facts of each case, in light of the prior art and its relationship to the appellants' invention. As in all determinations under 35 U.S.C. § 103, the decision maker must bring judgment to bear. It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the appellants' structure as a template and selecting elements from references to fill the gaps. The references themselves

must provide some teaching whereby the appellants' combination would have been obvious. In re Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (citations omitted). That is, something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. See In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984). In determining obviousness/nonobviousness, an invention must be considered "as a whole," 35 U.S.C. § 103, and claims must be considered in their entirety. Medtronic, Inc. v. Cardiac Pacemakers, Inc., 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In this case, we agree with the appellants argument (brief, p. 14) that there is no "reason or suggestion in any of the references to arrive at the instant invention other than that gleaned from the subject patent application itself." We agree with the examiner that the teachings of APA and Wickersheim would have suggested to one of ordinary skill in the art at the time the invention was made to have provided

two temperature sensing systems as taught by APA, each having a different wavelength (thus providing two different temperature sensing ranges), to produce a system capable of measuring temperature over a wider range in view of the teachings of Wickersheim. However, it is our view that there is no reason, suggestion, or motivation in the applied prior art to further modify the system suggested by APA and Wickersheim to arrive at the claimed invention. In that regard, we find that the applied prior art⁴ would not have been suggestive to further modify the system suggested by APA and Wickersheim to include the claimed "means for applying light simultaneously" (claim 1) or the step of "supplying light . . . simultaneously" (claim 11). In addition, we find that the applied prior art would not have been suggestive to further modify the system suggested by APA and Wickersheim to include the "discriminator means" as recited in claim 1 or the step of "discriminating" as recited in claim 11.

⁴ APA, Dakin, Wickersheim and Hartl.

Since all the limitations of the claims under appeal would not have been suggested by the applied prior art, the decision of the examiner to reject claims 1, 3, 4, 6 through 11 and 14 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 11 and 14 under 35 U.S.C. § 112, second paragraph, is affirmed and the decision of the examiner to reject claims 1, 3, 4, 6 through 11 and 14 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED-IN-PART

JOHN P. McQUADE)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
JEFFREY V. NASE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
JOHN F. GONZALES)	
Administrative Patent Judge)	

JVN/gjh

Appeal No. 1998-1524
Application No. 08/355,926

Page 12

DANIEL S. KALKA
McDERMOTT INC.
PATENT DEPARTMENT
20 SOUTH VAN BUREN AVENUE
BARBERTON, OH 44203

APPEAL NO. 1998-1524 - JUDGE NASE
APPLICATION NO. 08/355,926

APJ NASE

APJ GONZALES

APJ McQUADE

DECISION: **AFFIRMED-IN-PART**

Prepared By: Gloria Henderson

DRAFT TYPED: 02 Mar 99

FINAL TYPED: